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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : G01V 3/26		A1	(11) International Publication Number: WO 00/55651
(21) International Application Number: PCT/GB00/00969		(81) Designated States: CA, NO, US, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE).	
(22) International Filing Date: 15 March 2000 (15.03.00)		(43) International Publication Date: 21 September 2000 (21.09.00)	
(30) Priority Data: 9906096.4 18 March 1999 (18.03.99) GB		Published With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.	
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(54) Title: METHOD FOR DOWNHOLE LOGGING

(57) Abstract

A method and apparatus for measuring the properties such as permeability of the rock surrounding a borehole in which a directional seismic or sonic signal is generated downhole and propagated into the surrounding formation to generate an electrokinetic signal and the focus of the seismic signal is moved in three dimensions in the surrounding rock by physically moving the source or by having two seismic sources which generate oscillating seismic signals at different frequencies and the focus of the seismic signal is varied by wave interference or wave interaction.

